

Conducting Evaluations of Evidence that are Transparent, Timely and Lead to Health-Protective Actions. Feb 8-11, 2021

Over 4 days

Mon-Thurs, Feb 8 to 11, 2021

PST 7-11:30 AM; EST 10-2:30 PM; GMT 3-7:30 PM; GMT+1 4-8:30 PM

Organised by David Gee (Brunel, UK), Jennifer Sass (Natural Resources Defense Council, USA), Nicholas Chartres (University of California San Francisco, USA)

With support from: Olwenn Martin and Andreas Kortenkamp (Brunel University), Christina Ruden (Stockholm University)

Expert Assistance: Alexandra Stubblefield (NRDC); Nikole Blandon (NRDC); Aditi Shah (UCSF)

Good scientists have often evaluated the same evidence on hazardous agents very differently causing confusion amongst policymakers, politicians, and the public as well as controversies between scientists, as the COVID-19 virus demonstrates. The focus of the workshop will be on what explains the divergent evaluations, and how to minimize and render them more transparent, consistent, and supportive of timely action.

Day 1, Monday Feb 8th

(15 min) **Welcome, Introductions & Objectives of the Workshop.** Nicholas Chartres, Jennifer Sass

Session 1 - Coaxing causality from complexity

Chair: **Matthieu Schuler** (Head, Risk Assessment Division, ANSES, France)

(15 min) When science and policy fails high risk communities: a case study of hexavalent chromium – **Mark Mitchell, MD, MPH, FACPM** (National Medical Assoc, USA)

(15 min) Overcoming complexity and establishing causality in ATSDR investigations – **Patrick Breyse** (Director, NCEH/ATSDR, USA)

(15 min) Decision-making under uncertainty and ignorance – **Christopher Portier** (Ret Director US NTP, Switzerland)

10 min break

(30 min) **Breakout Question** – How do we establish sufficient strength of evidence for timely action, that avoids unacceptable consequences?

Breakout discussion leaders: Jennifer Sass, Patrick Breyse, Christopher Portier, Matthieu Schuler

10 min break

(45 min) Report back from breakout groups, plenary discussion – Led by **Nicholas Chartres**

(5 min) wrap up, prep for next day

Day 2, Tues Feb 9th

Session 2 - Lessons Learned from Divergent Evaluations of Some Physical and Chemical agents

Chair: **Michael Kundi** (Vienna University)

[15 mins presentation, 5 min discussion]

(15 min) Some key differences in the ICNIRP and IARC evaluations of RF evidence. **James Lin** (University of Illinois & Ed. Bioelectromagnetics, USA)

(25 min) Divergent evaluations on NO₂ toxicity: COMEAP report on quantification of all-cause mortality based on associations with long-term average NO₂ concentrations.

Roy Harrison (Birmingham University), **Alison Gowers** (Public Health England)

(15 min) Different strengths of timely evidence needed in divergent social and political contexts: various case studies. **Linda Birnbaum** (Ret Director NIEHS, USA)

(15 min) Core beliefs, weights of evidence and handling uncertainties in risk assessment – PFOA case study. **Theo Vermeire** (RIVM & Chair EU-SCHEER)

10 min break

(30 min) **Breakout Question** – What are the key sources of divergent evaluations and how can we minimise them for timely action?

Breakout discussion leaders: Michael Kundi, Elisebath Cardis, Linda Birnbaum, Roy Harrison, Aditi Shah

10 min break

(45 min) Report back from breakout groups, plenary discussion – Led by **Michael Kundi**

(5 min) wrap up, prep for next day – **Jennifer Sass**

Day 3, Wed Feb 10th

Session 3 – Systematic Reviews of Chemicals

Chair: **Bjorn Hansen** (ECHA Exec Dir-personal capacity)

(15 mins presentation, 5 min questions)

(15 min) Evidence evaluation and integration: the case of glyphosate. **Kurt Straif** (ISGlobal and Boston College).

(15 min) Governing complex risks when evidence is limited – from SOER2020 to the EU chemicals strategy for sustainability. **Xenia Trier** (European Environmental Agency)

(15 min) Evaluating EDCs systematically: the SYRINA approach. **Anna Beronius** (Karolinska Institute, Sweden)

(15 min) Towards transparent and consistent Systematic Review Processes in Hazard and Risk Assessments? **Tracy Woodruff** (University of California San Francisco, PRHE, USA)

10 min break

(30 min) **Breakout Question** –What are the key elements of systematic evaluations of harmful agents and what are the barriers to their more widespread use by hazard and risk assessment committees?

Breakout discussion leaders: Erik Millstone; Bjorn Hansen, Anna Beronius, Nicholas Chartres, Kurt Straif, Vince Cogliano

10 min break

(45 min) Report back from breakout groups, plenary discussion – led by **Bjorn Hansen**

(5 min) wrap up, prep for next day – **Nicholas Chartres, Tracey Woodruff**

Day 4, Thurs Feb 11th

Session 4 - Future Needs

Chair: Vince Cogliano

(15 min presentations, 5 min questions)

(15 min) The key characteristics of carcinogens – IARC perspective. **Kathryn Guyton** (IARC Monographie Programme, France)

(15 min) Application of high throughput data in regulatory decision-making – NGO perspective. **Kristi Pullen-Fedinick** (Natural Resources Defense Council, USA)

(15 min) Use of Biomonitoring data in hazard and risk assessment of PFCs. **Marika Kolossa-Gehring** (UBA, Germany).

(15 min) Future applications of key characteristics approaches. **Martyn Smith** (UC Berkeley, USA)

(15 min) Advancing evidence decision frameworks to address social equity, environmental justice, and stakeholder engagement. **Susan Norris**

10 min break

(30 min) **Breakout Question** – What is needed to ensure that evidence evaluations are timely and support health and environmental justice?

Breakout discussion leaders: Kathryn Guyton, Kristi Pullen-Fedinick, Martyn Smith, Marika Kolossa-Gehring, Jennifer Sass, Vincent Cogliano

10 min break

(45 min) Report back from breakout groups, plenary discussion – led by **Jennifer Sass**

(15 min) wrap up and next steps **Nicholas Chartres, Jennifer Sass**